A New Species of *Marcgravia* (Marcgraviaceae) from the Venezuelan Guayana

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ABSTRACT. A new species, Marcgravia punctifolia, is described and illustrated. It occurs in the tepui region of the Guiana Shield and is distinguished from all other taxa of the genus by the combination of abaxially punctate leaves, leaf shape, and apparently cauliflorous inflorescences.

During preparation of the chapter on Marcgraviaceae for a forthcoming volume of the *Flora of the Venezuelan Guayana*, I discovered an as yet undescribed taxon of the genus *Marcgravia* L., which is validated below.

There are nine Marcgravia species known so far with abaxially dotted leaves. This feature is not common within the genus, and its function is up to now unclear, but it is a good diagnostic character. Those nine species are M. caudata Triana & Planchon, M. eichleriana Wittmack, M. maguirei de Roon, M. weberbaueri Gilg, and M. sintenisii Urban of subgenus Plagiothalamium (flowers angled on pedicels), and M. atropunctata de Roon, M. comosa K. Presl, M. panamensis S. Dressler, M. serrae de Roon of subgenus Orthothalamium (flowers erect on pedicels), but none of them matches this new species. The three known specimens of the new species share not only the abaxial punctations, but also rather large leaf dimensions and a round to subcordate base. The latter two characters are unique among all of the punctate-leaved species mentioned above. In its floral characters, the new species resembles M. purpurea, which occurs in the same area, but the leaves distinguish it clearly from that taxon.

Another rather unusual feature is the apparently cauliflorous inflorescence on rather long leafless lateral shoots (peduncles). I refer to the latter as "apparently," as I have seen only two collections in reproductive state, both with a comparatively long, leafless peduncle greater than 13 cm long: The type collection is cauliflorous with the peduncles borne in leaf axils. The paratype from Brazil has a loose inflorescence only. The paratype from Venezuela is a sterile branch.

This cauliflory is not necessarily consistent with-

in this taxon, so I hesitate to use this unique character for naming the new species. Only two other species in the Marcgraviaceae develop cauliflorous inflorescences on normal-leaved branches, namely Sarcopera rosulata de Roon & Bedell and Schwartzia jimenezii (Standley) Bedell.

Additionally, a long-pedunculate inflorescence is unusual within the genus *Marcgravia*, known only in *M. pedunculosa* Triana & Planchon, *M. nervosa* Triana & Planchon, and *M. roonii* S. Dressler, but there the inflorescences are terminal on the leaved branches.

This new taxon belongs to series *Brachyracheae* Wittmack of subgenus *Marcgravia* (syn. *Plagioth-alamium* Delpino).

Marcgravia punctifolia S. Dressler, sp. nov. TYPE: Venezuela. Bolívar: Dist. Piar, Amaruay-tepui, S side about 1 km from SW corner, 5°54′N, 62°15′W, 550–810 m, 26 Apr. 1986, Liesner & Holst 20367 (holotype, VEN; isotype, MO). Figure 1.

Haec species nova glandes plurimas fuscas punctiformes in foliorum paginis infernis habet et ad subgen. *Plagiothalamium* ser. *Brachyracheas* pertinet, i.e., propter flores obliquos ad pedicellos et rhachim non-elongatam. Folia elliptica comparate grandia (15–25 cm longa, 4–11 cm lata) basi rotundata ad cordatam. Praeter punctas numerosas et parem glandium basilaminarium glandes laminares non adsunt. Inflorescentiae conspicue pedunculatae (plus quam 13 cm longae) et cauliflores possunt.

Liana, fertile branches pendulous, grayish brown, terete, short-bristly. Leaves petiolate; petioles stout, subterete, adaxially ± deeply canaliculate, 5–9 mm long, 2–4 mm diam., adult blades relatively large, elliptic, 15–25 × 4–11 cm, apex acuminate, acute to obtuse, acumen up to 2 cm long, base round to cordate, margin entire, in sicco chartaceous to subcoriaceous, midrib slightly canaliculate above, prominent beneath, lateral veins obscure to subprominent above, subprominent beneath; hypophyllous glands—marginal: dark glandular dots in the margin (indentations) up to 1 mm long, ca. 2–4 mm distance in between, sometimes

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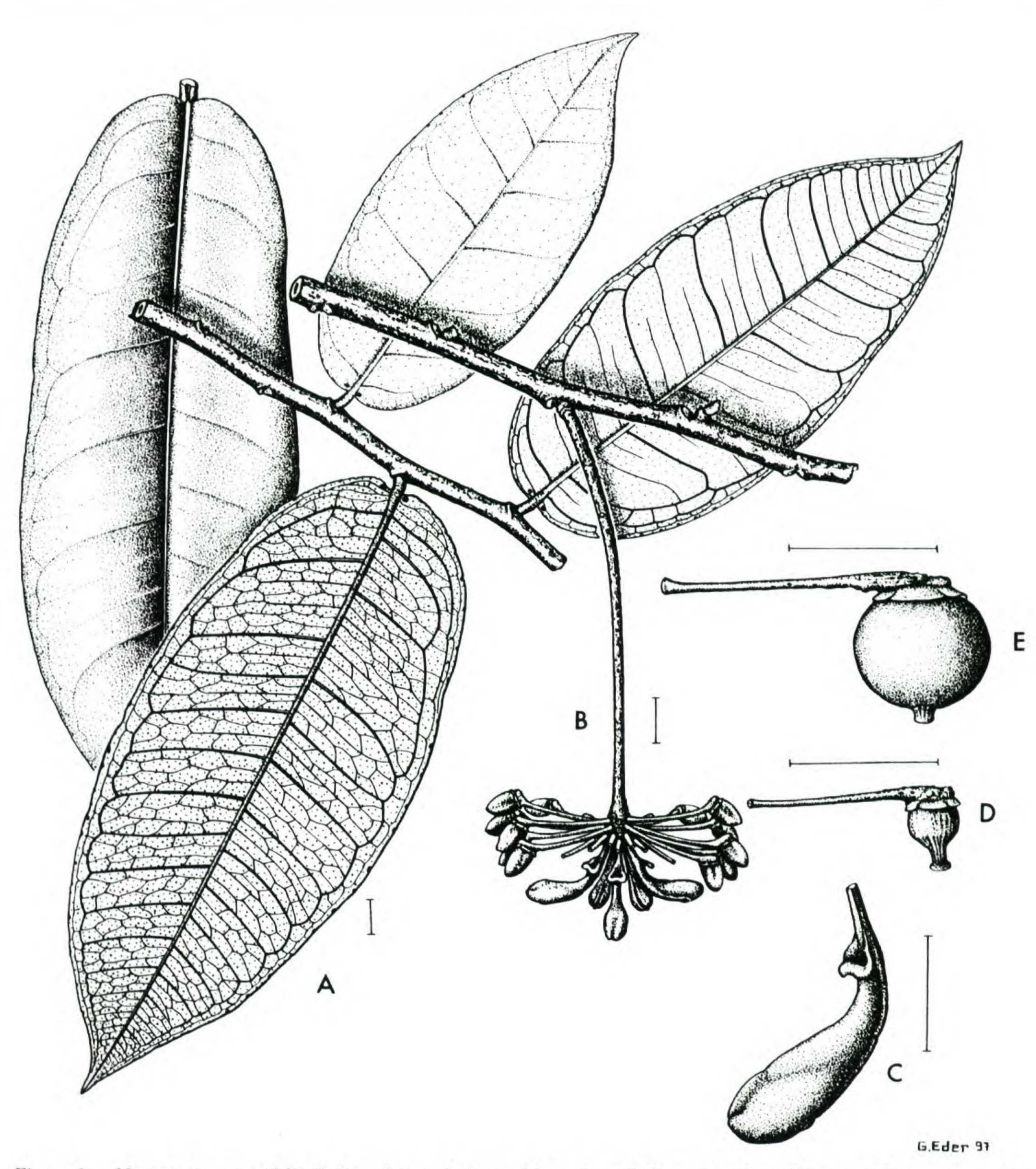


Figure 1. Marcgravia punctifolia S. Dressler. —A. Leaved branch. —B. Branch with cauliflorous inflorescence. —C. Nectary. —D. Flower after anthesis. —E. Fruit. A–D, Liesner & Holst 20367. E, Prance, Steward, Ramos & Farias 10188. Bars = 1 cm.

small, dark, oval, solid glands beside the margin, up to 0.5 mm long; basilaminar: inconspicuous, oval, poriform gland, up to 1 mm, with small perforation; no laminar ones, but numerous dark glandular spots scattered all over lower surface; juvenile leaves not seen. Inflorescence short-bristly, pendent, seemingly cauliflorous on leafless lateral shoots (on the type collection), with ca. 25–30 fertile and 5–6 sterile flowers (nectaries), the rachis obtusely clavate, 7–13 mm long, 5–9 mm diam.

Nectaries pitcher-shaped, stalk ca. 5–8 mm long, subterete in cross section, cup tubular-clavate, terminal slightly testiform, 15–20 mm long, 4–5 mm diam., inflated part ca. 3 mm diam., orifice slightly protruding. Flowers oblique, nearly perpendicular on pedicels, the latter 2–3(–4 in fruit) cm long, 1–2 mm diam. Bracteoles directly subtending the calyx, sepaloid, 0.5–1 \times 1.5–2 mm, broadly triangular. Sepals \pm equal, 0.7–1.5 \times 3–4 mm, oval to very broadly elliptic, very short, spreading, margin

thinned, irregular, without dark glandular spots. Corolla caps ovoid, apically asymmetrical, obtuse, 7–8 mm long, ca. 4 mm diam. basally. Stamens (not seen). Ovary globoid, (7?)8–9(–10?)-locular, apically bluntly acuminate (style), 2.5–3 mm diam., ca. 2.5 mm tall; style ca. 1.5 mm long, stigma 1.5 mm diam. Fruits globoid, 10–12 mm diam., 9–11 mm tall, roughish, stigma 1–1.5 mm tall, ca. 2 mm diam.

Distribution. Known from Cerro Marutani and Amaruay-tepui in Estado Bolívar, Venezuela; and Serra dos Surucucus, Territorio Roraima, Brazil; in montane rainforests at 500–1000 m elevation.

The epithet alludes to the conspicuously punctate lower surface of the relatively large but thinly elliptic leaves. Furthermore, it is characterized by the round to (sub)cordate base and the apparently cauliflorous inflorescence on rather long leafless lateral shoots (peduncles). This species seems morphologically closely related to *M. purpurea* because of its flower characters, but differs in leaf shape and punctation. There is also some similarity with *M. weberbaueri* from the Andes of Colombia, Ecuador, and Peru, which shares the punctate lower leaf, but has smaller, basally acute blades and much shorter peduncles terminal on shoots.

Paratypes. VENEZUELA. Bolívar: Dist. Heres, Cerro Marutani, cumbre, 3°50′N, 62°15′W, 900–1000 m, 11, 12 and 14 Jan. 1981, Steyermark, Maguire, Brewer-Carías & Carreño 124077 (MO). BRAZIL. Roraima: Serra dos Surucucus, NW of Mission Station, 2°42–47′N, 63°33–36′W, Prance, Steward, Ramos & Farias 10188 (U).

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